Pearson BTEC Level 3 Nationals Certificate, Extended Certificate, Foundation Diploma, Diploma, Extended Diploma

Wednesday 15 January 2025

Morning (Time: 2 hours)

Paper reference **31761H**

Information Technology

UNIT 2: Creating Systems to Manage Information

Part B

You must have:
activity6.rtf, activity7.rtf, partB_database.accdb or partB_database.mdb

Instructions

- **Part A** and **Part B** contain the material for the completion of the assessment under supervised conditions.
- There are 40 marks for **Part A** and 26 marks for **Part B**, giving a total mark for the assessment of 66.
- **Part A** and **Part B** are specific to each series and this material must be issued only to learners who have been entered to take the assessment in the specified series.
- Learners **must only** have access to **Part B** during this examination session.
- This booklet should be kept securely until the start of the 2-hour supervised assessment period.
- **Part A** materials **must not** be accessed during the completion of **Part B**.
- **Part A** and **Part B** should be submitted together for each learner.
- This booklet should not be returned to Pearson.
- Answer **all** activities.

Information

- The total mark for this paper is 26.

Turn over ▶

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Instructions to Invigilators

This paper must be read in conjunction with the unit information in the specification and the *BTEC Instructions for Conducting External Assessments (ICEA)* document. See the Pearson website for details.

Refer carefully to the instructions in this booklet and the *BTEC Instructions for Conducting External Assessments (ICEA)* document to ensure that the assessment is supervised correctly.

The 2-hour **Part B** activities must be carried out under examination conditions.

The database and electronic templates for Activities 6 and 7 are available on the website for centres to download for candidate use.

Learners must complete **Part B** on a computer using the templates provided and appropriate software. All work must be saved as PDF documents for submission.

Invigilators may clarify the wording that appears in **Part B** but cannot provide any guidance in completion of the activities.

Invigilators should note that they are responsible for maintaining security and for reporting issues to Pearson.

Maintaining security

- Learners must not bring anything into the examination environment or take anything out.
- Centres are responsible for putting in place appropriate checks to ensure that only permitted material is introduced into the examination environment.
- Internet access is **not** permitted.
- Learner work must be regularly backed up. Learners should save their work to their folder using the naming instructions indicated in each activity.
- During any permitted break, and at the end of the examination, materials must be kept securely, and no items removed from the supervised environment.
- Learners can only access their work under supervision.
- User areas must only be accessible during the examination session and only by the individual learners.
- Any materials being used by learners must be collected in at the end of the examination.
- Following completion of **Part B**, all materials must be retained securely for submission to Pearson.
- **Part A** materials must not be accessed during the completion of **Part B**.

Outcomes for submission

Each learner must create a folder to submit their work.

The folder should be named according to this naming convention:

[Centre #]_[Registration number #]_[surname]_[first letter of first name]_PartB

Example: Joshua Smith with registration number F180542 at centre 12345 would have a folder titled

12345_F180542_Smith_J_PartB

Each learner will need to submit 3 PDF documents **and** their final database within their folder.

The 3 PDF documents should use these file names:

Activity 6: activity6_[Registration number #]_[surname]_[first letter of first name]
Activity 7: activity7_[Registration number #]_[surname]_[first letter of first name]
Activity 8: activity8_[Registration number #]_[surname]_[first letter of first name]

Instructions for Learners

Read the scenario, brief and activities information carefully.

Plan your time carefully to allow for the preparation and completion of all the activities.

Internet access is **not** allowed.

You will complete the activities under supervision and your work will be kept securely at all times.

You must work independently throughout the examination and must not share your work with other learners.

Your invigilator may clarify the wording that appears in **Part B** but cannot provide any guidance in completion of the activities.

Part A materials **must not** be accessed during the completion of **Part B**.

Outcomes for submission

You must create a folder to submit your work.

Each folder should be named according to this naming convention:

[Centre #]_[Registration number #]_[surname]_[first letter of first name]_PartB

Example: Joshua Smith with registration number F180542 at centre 12345 would have a folder titled

12345_F180542_Smith_J_PartB

You will need to submit 3 PDF documents **and** your final database within this folder.

The 3 PDF documents should use these file names:

Activity 6: activity6_[Registration number #]_[surname]_[first letter of first name]
Activity 7: activity7_[Registration number #]_[surname]_[first letter of first name]
Activity 8: activity8_[Registration number #]_[surname]_[first letter of first name]

Part B Brief

You are advised to spend 10 minutes reading the scenario and the activities you are to complete.

You may make notes and/or highlight information to use in the completion of the documents you need to produce for your activities.

Scenario

Lowry Castle Entertainment has partially developed a database that will eventually merge with the database you created in **Part A**.

To book a party the client specifies the date, the number of guests, the room and the basic package.

Each package includes room decoration, seating, dance floor and food.

Clients can add extras to the basic packages at an additional cost. For example, clients can hire a chocolate fountain. There are no free extras and £500 is the maximum cost for a single extra.

Returning clients are clients who have previously booked a party. If the total spend for their most recent party was more than £1300, they are eligible for a 10% discount on the new party.

Part B

You must complete ALL activities within Part B.

Produce your documents using a computer.

Save your documents in your folder ready for submission using the formats and naming conventions indicated.

Activity 6: Forms (1 hour 10 minutes)

Note

- The structure of the tables provided should not be changed in any way, e.g. do not add validation to the tables, do not change data types.
- You will be required to use all the tables.

Create an efficient interface that will facilitate database input by producing:

(a) an input form to add an extra

- The form should be ready for data entry.
- The name of the extra must be present.
- The cost of the extra must be within the specified range.
- There should be a combo box to select the category ID.
- Valid data should be appended to the extra table, a save message should display and the form should be cleared ready for the next data entry.
- A suitable error message should appear where invalid data has been used.

(b) an input form to add a party booking for a returning client

- The form **must not** include validation for any fields.
- The form **must not** include an automated routine to save the data.
- There must be a combo box to select a client.
- When the client is selected, this information must be automatically displayed in fields on the form:
  - their most recent party date
  - the number of guests for that party
  - the total spent (cost of basic package + chosen extras) for that party
  - the percentage discount they are entitled to for the new party.
- There must be fields to enter these details about the new party:
  - the party date
  - the number of guests.
- There must be combo boxes to select these details about the new party:
  - the package
  - the room.

Evidence your interface as screenprints using the given **activity6.rtf** template.

Your screenprints must show:

- the **DESIGN** view and **FORM** view of all the forms you have created
- the **DESIGN** view of any queries you have created and used with the forms including fields and criteria
- the **DATASHEET** view of any queries you have created and used with the forms
- details of any calculations, validation and macros/code you have created and used with the forms.

Ensure sufficient information is provided to allow a competent third party to maintain the database.

Save the evidence of your interface as a PDF in your folder for submission as **activity6_[Registration number #]_[surname]_[first letter of first name]**

You are advised to spend 1 hour and 10 minutes on this activity.

(Total for Activity 6 = 14 marks)

Activity 7: Interface Testing (20 minutes)

Test the interface of your relational database using suitable test data (normal, erroneous and extreme as appropriate).

You **must not** add validation to any of the tables.

You must provide evidence of **form level** testing that proves:

1. the input form to add an extra is ready for data entry when the form opens
2. the name of the extra must be present
3. the cost of the extra cannot be above the top of the range
4. the cost of the extra cannot be below the bottom of the range
5. a record will save in the extra table if all the required data is present and valid
6. these details appear in fields on the returning client party booking form when the client is selected:
   - their most recent party date
   - the number of guests for that party
   - the total spent (cost of basic package + chosen extras) for that party
   - the percentage discount they are entitled to for the new party.

Complete the test log to show how you have tested your input forms using the given **activity7.rtf** template.

Save your test log as a PDF in your folder for submission as **activity7_[Registration number #]_[surname]_[first letter of first name]**

You are advised to spend 20 minutes on this activity.

(Total for Activity 7 = 6 marks)

Activity 8: Interface Evaluation (20 minutes)

Evaluate your interface.

You should consider the quality, performance and usability of the interface you have created in terms of how well it ensures:

Extras form

- the form to add an extra is ready for data entry when the form opens
- the name of the extra must be present
- the cost of the extra must be within the specified range
- a record will save in the extra table if all the required data is present and valid
- the form should clear ready for the next data entry.

Returning client party booking form

- there must be a combo box to select a client
- when the client is selected this information must be automatically displayed in fields on the form:
  - their most recent party date
  - the number of guests for that party
  - the total spent (cost of basic package + chosen extras) for that party
  - the percentage discount they are entitled to for the new party.
- there must be fields to enter these details about the new party:
  - the party date
  - the number of guests.
- There must be combo boxes to select these details about the new party:
  - the package
  - the room.

Save your evaluation as a PDF in your folder for submission as
activity8_[Registration number #]_[surname]_[first letter of first name]

You are advised to spend 20 minutes on this activity.

(Total for Activity 8 = 6 marks)

TOTAL FOR PART B = 26 MARKS
TOTAL FOR PAPER = 66 MARKS